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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,249	11/17/2000	Susanne Dagmar Pippig	4-31192/CIP	7928

7590

05/20/2003

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EXAMINER

MARVICH, MARIA

ART UNIT

PAPER NUMBER

1636

DATE MAILED: 05/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/715,249

Applicant(s)

PIPPIG ET AL

Examiner

Maria B Marvich, PhD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20,23-27,29 and 36-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,23-26,36-38 and 42-72 is/are allowed.
- 6) ☒ Claim(s) 27 and 29 is/are rejected.
- 7) ☒ Claim(s) 39-41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

This office action is in response to an amendment filed 3/3/03. Claims 20, 23-27, 29 and 36-72 are pending in this application. No new matter has been added by this amendment.

#### ***Response to Amendment***

Objections to the Specification as it contains two copies of the Sequence listing are withdrawn in light of cancellation of the sequence listing of pages 41-50.

Objection to claims 1, 16, 20 and 27 as being drawn to non-elected matter is withdrawn in light of amendment to claims. Specifically, claims 1 and 16 have been canceled and claims 20 and 27 have been amended.

Objection to claim 8 as being a duplicate of claim 20 is withdrawn in light of cancellation of claim 8.

Rejection of claims 15 and 19 under 35 U.S.C. 112, first paragraph, is withdrawn in light of cancellation of claims 15 and 19.

Rejection of claims 20-26, 29 and 36-38 under 35 U.S.C. 112, second paragraph, is withdrawn in light of amendment to claims 20 and 29. Claim 28 was originally rejected in the office action of 10/22/03 but as applicant noted, this should have been claim 29.

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Claim rejections of claims 1-3, 6, 7, 10, 11, 16-18 and 33 under 35 U.S.C. 102 (b) as being anticipated by Vogelstein et al. WO 91/03489 A1 have withdrawn in light of amendment to the claims. The cited claims have been cancelled. Claims 20, 23-27, 29, 36, 39 and 40 have been amended to read on the identification of mammalian hematopoietic cells into which has been transduced mutant EGFR. Vogelstein et al does not teach use of hematopoietic cells.

Claim rejections of claims 1-3, 5, 6, 8, 10, 15-17, 19, 20, 22, 27-29, 33, 36, 39 under 35 U.S.C. 102(b) as being anticipated by Kashles et al. Mol Cell Biol (1991) 11:1454-1463 have been withdrawn in light of amendment to claims. The cited claims have been cancelled. Claims 20, 23-27, 29, 36, 39 and 40 have been amended to read on the identification of mammalian hematopoietic cells into which has been transduced mutant EGFR. Kashles et al teach use of NIH3T3 cells.

Claim rejections of claims 1-3, 5-8, 10, 11, 15-20, 22, 23, 27-29, 33, 36 and 39 under 35 U.S.C. 102(b) as being anticipated by Chen et al US 6,235,729 have been withdrawn in light of amendment to claims. Cited claims 1-3, 5-8, 10, 11, 15-19, 22, 28 and 33 have been cancelled. Claims 20, 23-27, 29, 36, 39 and 40 have been amended to read on the identification of mammalian hematopoietic cells into which has been transduced mutant EGFR. Chen et al teach use of human prostate cancer cells.

Claim rejections of claims 1-3, 6-8, 10, 11, 16-18, 20, 22, 25, 26, 33 and 37 under 35 U.S.C. 103 (a) as being anticipated by Vogelstein et al. WO 91/03489 A1 have withdrawn in

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light of amendment to the claims. The cited claims have been cancelled. Claims 20, 23-27, 29, 36, 39 and 40 have been amended to read on the identification of mammalian hematopoietic cells into which has been transduced mutant EGFR. Vogelstein et al did not teach use of hematopoietic cells.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 27 and 29 are rejected under 35 U.S.C. 102(a) as being anticipated by Chida et al.

Blood (1999) 93: 1567-1578.

Chida et al. teach the infection of primary mouse fetal liver hematopoietic cells with retroviral vectors encoding a chimeric EGFR-EPOR receptor, which encodes the extracellular domain of the EGFR and the intracellular domain of the EPOR, the protein of interest. Furthermore, mutant versions of the EGFR are used in the chimera in which the EGFR extracellular domain contains substitutions of the tyrosine residues with phenylalanine (abstract). The hematopoietic cells were infected and cultured to express EGFR and EPOR receptor. EGFR or GFP were used as markers of cells that express the chimera (methods page 1568, column 2, paragraph 2-4). **This is a new rejection necessitated by amendment.**

Claims 20, 23-26, 36-38 and 42-72 are allowed.

Claims 27 and 29 are rejected.

Claims 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria B Marvich, PhD whose telephone number is (703) 605-1207. The examiner can normally be reached on M-F (6:30-3:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, PhD can be reached on (703) 305-1998. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 305-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3291.

Maria B Marvich, PhD  
Examiner  
Art Unit 1636

May 15, 2003

DAVID GUZO  
PRIMARY EXAMINER  
